

Name: _____

Date: _____ Period: _____

Review: ESRT Review

Inferred Properties of Earth's Interior:

1. What is the density of the continental crust?
2. What is the density of the oceanic crust?
3. What is the density range in the outer core?
4. What is the density range in the inner core?
5. What is the approximate depth between the Asthenosphere and Stiffer Mantle?
6. What is the approximate temperature between the Asthenosphere and Stiffer Mantle?
7. What is the approximate pressure between the Asthenosphere and Stiffer Mantle?
8. What is the approximate depth between the Asthenosphere and Stiffer Mantle?
9. What layer of Earth's interior is liquid?
10. What elements are inferred to be in the inner core?

Review: ESRT Review

Earthquake P-Wave and S-Wave Travel Time:

1. Approximately how far will a p-wave travel in 4 minutes?
2. Approximately how far will a s-wave travel in 4 minutes?
3. How long does it take for a p-wave to travel 7000 kilometers?
4. How long does it take for a s-wave to travel 7000 kilometers?
5. If an earthquake's epicenter is 3000 km away from a seismograph station; approximately how long did the p-wave take to arrive to the seismograph station?
6. A p-wave took 3 minutes and 20 seconds to reach a seismic station; approximately how long did it take for the s-wave to reach the same station?
7. A p-wave arrives at 3:00:00 and the s-wave arrives at 3:07:20, what is the exact distance that the seismic station is away from the epicenter?
8. A p-wave arrives at 7:52:50 and the s-wave arrives at 8:00:00, what is the exact distance that the seismic station is away from the epicenter?
9. If a p-wave arrived at a seismic station at 12:10:00 and the s-wave arrived at 12:17:00, what is the time of origin of the earthquake?
10. How many seismic stations are needed to locate the epicenter of an earthquake?